

Serial No. 10/621,129  
67,008-070; S-5668

**AMENDMENTS TO THE DRAWINGS**

Figures 5 and 7 have been amended to coordinate perspective in the view. No new matter has been added. These drawings replace the previously filed drawings.

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### REMARKS

Applicant wishes to thank the Examiner for the detailed remarks. Claims 1, 4, 8, 12, 16, 22, 23, 24, 26, and 27 have been amended and claims 2, 3, and 25 have been canceled. Claims 28-37 stand withdrawn. New claims 38-40 are presented. Accordingly, claims 1, 4, 5-24, 26, 27, and 38-40 are pending.

Applicant respectfully suggests that the amended claims are properly allowable under 35 U.S.C. §112 as Applicant has utilized the Examiner's proposed language of "resilient characteristic" which is at least as broad as Applicant's original "flexibility" terminology.

Claims 1 and 12 were rejected under 35 U.S.C. §102(b) as being anticipated by *WO 01/98100 to Pengilly*. Applicant respectfully traverses this rejection. *Pengilly* fails to disclose or suggest a gear mesh generally transverse to the pinion gear axis as recited in amended claims 1 and 12. The amended claims are properly allowable.

Claims 3-11, 13-24 and 26-27 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Kish* (5,813,292) in view of *WO 01/98100 to Pengilly*. Applicant respectfully traverses these rejections as there is absolutely no teaching, suggestion, or motivation to modify *Kish* (5,813,292) in view of *Pengilly* as proposed.

The Examiner admits that *Kish* (5,813,292) does not teach a floating pinion gear driven by a radially unsupported pinion shaft which provides a resilient characteristic to allow the floating pinion axis of rotation to be displaceable off the common curved line to split a load between the first spur gear and the second spur gear. The Examiner suggests that it would have been obvious to modify the *Kish* gear train branches 106L and 106R such that the pinion gear 114L and 114R are floating pinions, which are driven by a pair of radially unsupported pinion shafts, in view of *Pengilly*'s teaching of the floating pinion gear in order to evenly distribute the torque between the first and second spur gears.

It should be noted that *Kish* is assigned to the assignee of the present application. *Kish*, although effective, provides rigid precisely machined gear interfaces. The only gear movement *Kish* discloses is the relative axial movement between gears 116L/R and 114L/R in response to movement between the double helical bull gear 108 and the double helical bull pinions 118L/R.



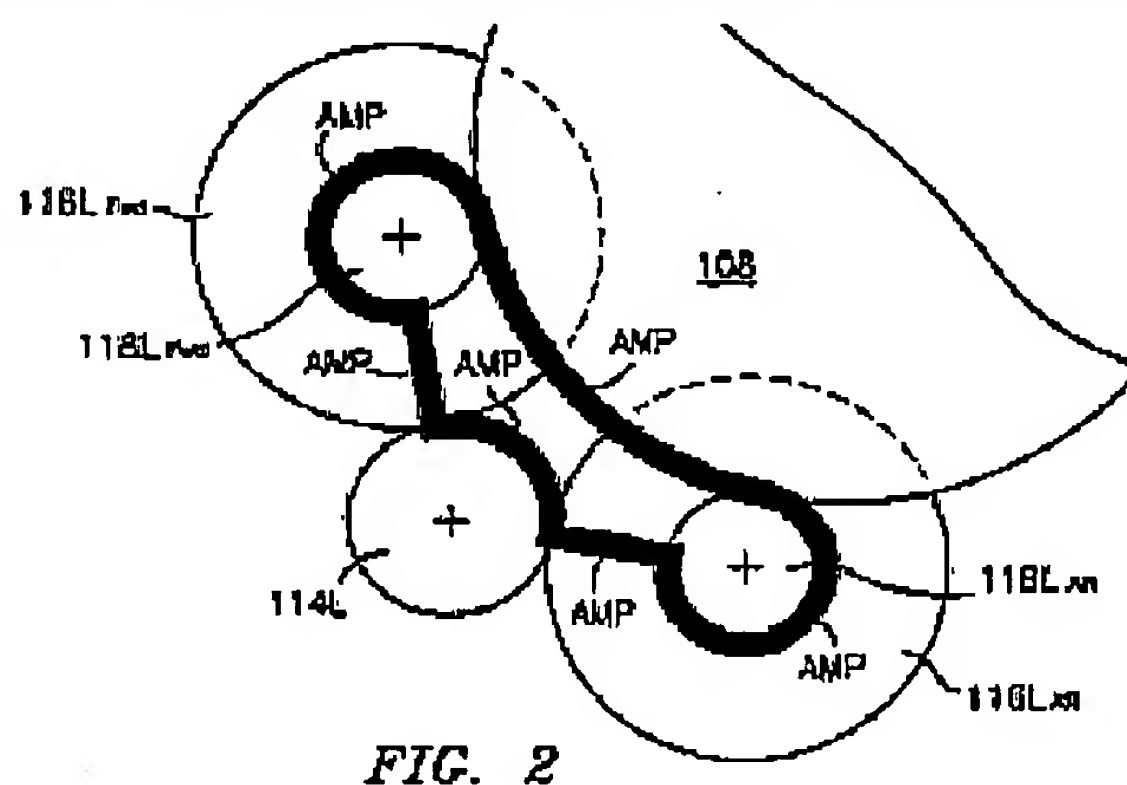
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That is, the Examiner is proposing the replacement of an effective, compact and efficient high-speed gear train with a gear train designed for trucks. In other words, the Examiner is utilizing Applicant's gear train as a blueprint to combine disparate gear train branches in an attempt to recreate Applicant's system. This is hindsight – this is improper.

Moreover, if the Examiner is proposing combining the entire gear train of *Pengilly* other than the gear 20 (gears 14, 16a, 16b, 16c, and 16d), an exceedingly bulky gearbox would result as such a gear arrangement (gears 14, 16a, 16b, 16c, and 16d) must be utilized for each high-speed input shaft. Such an arrangement may be acceptable for a truck, however, such an arrangement is unacceptable for a helicopter where weight and compactness are of high importance. One of skill in the art would have no motivation to make such a combination. The claims are properly allowable.

Furthermore, even if the combination were properly made – which they are not – there are differences between the claimed invention and the teachings of the cited references so that the combination does not meet the limitations of Applicant's claims.

Claims 1 and 8 as well as claim 12 recite that the first gear axis of rotation, the second gear axis of rotation and the pinion gear axis of rotation located along a common line, the pinion gear axis of rotation displaceable off the common line. *Kish*, even under the Examiner's interpretation, fails to disclose or suggest that the axes of rotation of the pinion and spur gears of gear train branches 106L/R are along a common line as evidenced in *Kish* Figure 2 below:



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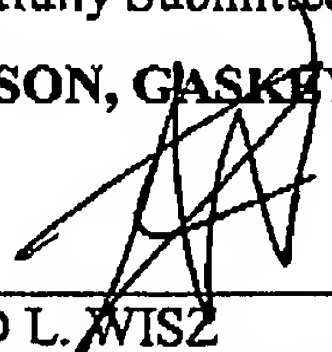
Thus, even if the combination is proper – which it is not – amended claims 1, 8 and 12 are properly allowable.

New claims 38-40 recite further angled input shaft features, which are neither disclosed nor suggested by the cited references and are thus properly allowable.

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Applicant respectfully submits that this case is in condition for allowance. If the Examiner believes that a teleconference will facilitate moving this case forward to being issued, Applicant's representative can be contacted at the number indicated below.

Respectfully Submitted,  
**CARLSON, GASKEY & OLDS, P.C.**



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